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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/606,734	06/29/2000	David L. Black	07072-113001	6696

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RICHARD M. SHARKANSKY
PO BOX 557
MASHPEE, MA 02649

EXAMINER

NGUYEN, THAN VINH

ART UNIT	PAPER NUMBER
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2187

DATE MAILED: 10/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/606,734

Applicant(s)

BLACK ET AL.

Examiner

Than Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 9/14/04
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 2,3,5,6,8-10 and 16-18 is/are allowed.
- 6) ☒ Claim(s) 1,4,7,15 and 23-26 is/are rejected.
- 7) ☒ Claim(s) 11-14 and 19-22 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 7/14/04.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

DETAILED ACTION

1. This is a response to the amendment, filed 7/14/04.
2. Claims 1-26 are presented for examination.

Information Disclosure Statement

3. The information disclosure statement filed 7/14/04 has been considered..

Response to Amendment

4. Applicant's has amended the claims 2,3,5,6,8,9,10,16-18 to include allowable subject matter stated in the previous office action. These claims are allowable. Applicant has also amended the other claims to include new limitations. These new limitations are addressed below.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1,4,7,15,23-26 are rejected under 35 U.S.C. 102(e) as being anticipated by Chung et al (USP 6,470,389).

As to claim 1,4,7,15,23-26:

Chung teaches methods and apparatus for message transfer in computer storage system including an array of storage devices, a system cache memory, back end directors

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for controlling data transfer between the storage devices and system cache memory, and front end directors for controlling data transfer between the cache memory and host computer. Chung teaches a method comprising:

- passing messages through the message network (transfer messages/packets on network; 1/58-2/14);

- operating the first and second directors to control data transfer between the host computer and the bank of disk drives in response to the messages passing between the directors through the messaging network as such data passes through the data transfer section (accessing information on servers across network; Fig. 1; 1/40-57), such message passing comprising:

- preparing, in one of the directors, a message to be sent to a receiving director(s) (generate packet; 5/59-62);

- building a descriptor comprising a command field indicating the receiving director(s) to receive the message (destination address; 2/18);

- encapsulating the message payload of the descriptor into a packet, such message/comprising:

- a header, such header including: a source portion indicating the transmitting director; a destination portion indicating the receiving director (header of packet; 2/1-3/58);

- the message payload (the request; 2/1-67);

- transmitting the packet to the director(s) through the network (send packet over network/ 1/57-2/50);

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decoding the destination portion of the packet to route the packet to the receiving director (route packet to destination 7/39-8/15).

Allowable Subject Matter

7. Claims 2,3,5,6,8,9,10,16-18 are allowed for reasons indicated in the previous office action.
8. Claims 11-14,19-22 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
9. As to claim 11,19 the prior art of record does not teach the descriptor includes a message payload indicating an address in the bank of disk drives having the requested data.
10. Claims 12-14,20-22 are also allowable for incorporating the limitations of parent claim, and further limitations.

Conclusion

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

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extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Than Nguyen whose telephone number is 703-305-3866.

The examiner can normally be reached on 8am-3pm M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Don Sparks can be reached on 308-1756. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Than Nguyen
Examiner
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